



Maryland Influenza Plan

2011-2012 Flu Season

Maryland Department of Health and Mental Hygiene
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OUTLINE

- I. Introduction
- II. Purpose
- III. Definitions
- IV. Pre Flu Activity
 - a. Trigger and Warnings
 - b. Surveillance
 - c. Communication
 - d. Vaccination
 - e. Community Prevention and Mitigation
 - f. Pandemic Threat
- V. Early Flu Activity
 - a. Trigger and Warnings
 - b. Surveillance
 - c. Communication
 - d. Vaccination
 - e. Community Prevention and Mitigation
 - f. Pandemic Threat
- VI. Peak Flu Activity
 - a. Trigger and Warnings
 - b. Surveillance
 - c. Communication
 - d. Vaccination
 - e. Community Prevention and Mitigation
 - f. Pandemic Threat
- VII. Late Flu Activity
 - a. Trigger and Warnings
 - b. Surveillance
 - c. Communication
 - d. Vaccination
 - e. Community Prevention and Mitigation
 - f. Pandemic Threat
- VIII. Conclusion

Appendix A: Communications Plan and Documents

I. INTRODUCTION

Influenza (“flu”) is a contagious respiratory illness caused by the influenza virus. It can cause mild to severe illness, and at times can lead to death. Older people, young children and people with certain health conditions are at higher risk for serious flu complications. **The best way to prevent the flu is by getting vaccinated each year.**

Influenza is spread by airborne droplets made when an infected person coughs, sneezes or talks. Less often, a person might also get flu by touching a surface or object that has flu virus on it and then touching their own mouth, eyes or nose.

You may be able to pass on the flu to someone else even before you know you are sick, as well as while you are sick. Most healthy adults may be able to infect others beginning 1 day before symptoms develop and up to 5-7 days after becoming sick. Some people, especially children and people with weakened immune systems, might be able to infect others for an even longer time.

Flu seasons occur each year with varying severity. Over a period of 30 years, between 1976 and 2006, estimates of flu-associated deaths range from a low of about 3,000 to a high of about 49,000 people in the United States.

During 2009-2010, a new and very different flu virus (called 2009 H1N1) spread worldwide causing the first flu pandemic in more than 40 years. It is estimated that the 2009 H1N1 pandemic resulted in more than 12,000 flu-related deaths in the U.S. In contrast to seasonal flu, nearly 90 percent of the deaths occurred among people younger than 65 years of age.

II. PURPOSE

The Maryland Department of Health and Mental Hygiene (DHMH) developed the Maryland Influenza Plan (MIP) as a guide for the State’s prevention, surveillance, and mitigation of the influenza virus and its effects on the residents of Maryland. The MIP will categorize flu activity by stages and include information to aid in the identification of outlier influenza activity potentially caused by an unusual flu season or a pandemic.

III. DEFINITIONS

Antiviral Medications – prescription medications that can be used for prevention or treatment of flu viruses

Communication – to transmit information so that it is satisfactorily received or understood by the general public

Community Prevention and Mitigation – tactics used by public health officials and the general public to reduce the effects of the flu

ESSENCE – the Electronic Surveillance System for the Early Notification of Community-based Epidemics

Influenza-like Illness (ILI) – medical diagnosis that indicates a possible influenza infection but has not been confirmed by a laboratory

Influenza Vaccination – preventive medical intervention that greatly reduces the likelihood of an individual being infected by the flu

MRITS – the Maryland Resident Influenza Tracking Survey

Pandemic Influenza – a flu pandemic occurs when a novel influenza A virus emerges for which there is no or little immunity in the human population. In the past, pandemic strains have caused serious illness and have spread easily from person-to-person worldwide

Pandemic Threat – outlier data, situational awareness, or outcome that indicates a potential flu pandemic

Seasonal Influenza – annual outbreaks of flu that typically occur during the late fall through early spring. Most people have natural immunity, and a seasonal flu vaccine is available each year. In a typical year, approximately 5 to 20 percent of the population gets the seasonal flu

Surveillance – epidemiological activities of gathering and analyzing data to provide situational awareness

Trigger and Warnings – surveillance and situational awareness that indicates influenza activity may be increasing or decreasing

IV. PRE FLU ACTIVITY

Pre flu activity is characterized by the absence or minimal presence of influenza throughout Maryland prior to the beginning of seasonal flu season.

A. Trigger and Warnings

- Time period prior to the first lab confirmed case of flu in Maryland; typically June through September

B. Surveillance

- Epidemiological
 - Coordinate with the Centers for Disease Control and Prevention (CDC) on likely seasonal flu strains and potential pandemic strains that could affect Maryland during next flu season
 - Monitor any disease outbreaks with patients exhibiting upper-respiratory infections or symptoms of influenza-like illness (ILI)
 - Monitor ILI-activity in hospital emergency departments in the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) for statistically significant warnings and threats
- Laboratory
 - Identify and confirm any flu cases prior to the beginning of flu season or early flu activity stage

C. Communication

- Public Information
 - Develop materials and coordinate public health messaging; encourage vaccination
 - Provide update on vaccine supplies and distribution
 - Announce seasonal flu clinics at schools and local health departments
 - Provide media with preventive measures including hand washing and cough etiquette
- Information for Healthcare Community and Providers
 - Recommendations on vaccine ordering and availability
 - Continue to recruit sentinel providers and laboratories into network
 - Distribute current vaccine information sheets (VIS) to providers

D. Vaccination

- State Actions
 - Receive and distribute vaccine to local providers and local health departments
- Suggested Local Actions
 - Order vaccine from DHMH
 - **Fall** – Vaccinate healthcare workers; hold school flu clinics; local health departments hold vaccination clinics for general public

E. Community Prevention and Mitigation

- Medical Countermeasures
 - Update State antiviral medications distribution plan
 - Maintain antiviral medications stockpile

F. Pandemic Threat

- ESSENCE data that suggest a significant increase in ILI outside of typical flu season
- Outbreak or multiple outbreaks of ILI outside of typical flu season

V. Early Flu Activity

Early flu activity is the time period after the first laboratory confirmed case of influenza in Maryland has occurred. Reported cases of influenza or ILI remain sporadic.

A. Triggers and Warning

- The trigger for this stage is the first case of laboratory confirmed seasonal influenza in Maryland

B. Surveillance

- Epidemiological
 - Examine data obtained from ILINet sentinel providers
 - Monitor the Maryland Resident Influenza Tracking Survey (MRITS)
 - Monitor and review ESSENCE hospital emergency department ILI data
 - Investigate influenza / ILI outbreaks
 - Monitor severity of virus including number of hospitalizations and deaths
 - Monitor reportable conditions related to flu including pneumonia cases in healthcare workers, hospitalizations, pediatric flu deaths, and novel strains of Type A influenza
 - Monitor ILI-activity in hospital emergency departments in ESSENCE for statistically significant warnings and threats

- Monitor hospital emergency department status, intensive care units, and hospital bed capacities
- Laboratory
 - Monitor characterization of virus including subtypes and resistance to antiviral medications
 - Provide confirmatory testing of viral specimens

C. Communication

- Public Information
 - Provide educational messages including vaccine promotion, disease characteristics, and steps to take if you get sick
 - Announce seasonal flu clinic dates and locations
 - Communicate disease severity / alerts and monitor news coverage
 - Hold vaccination event
- Information for Healthcare Community and Providers
 - Outbreak guidance to long term care facilities (LTCFs)
 - Update on vaccine supply and availability
 - Provide recommendations regarding the use of antiviral medications
 - Provide epidemiological characterization of virus and infection control

D. Vaccination

- State Actions
 - Monitor vaccine distribution and provider orders
 - Manage vaccine-administration data collection
- Suggested Local Actions
 - **Fall/Winter** – Continue to vaccinate healthcare workers; hold school flu clinics; advocate vaccination for high-risk groups; local health departments hold vaccination clinics for general public

E. Community Prevention and Mitigation

- Medical Countermeasures
 - Monitor status of public and private stock of antiviral medications
 - Collaborate with CDC regarding guidance and recommendations for use of antiviral medications

F. Pandemic Threat

- Laboratory suspected or confirmed test showing a novel strain of influenza
- Initial severe flu cases (hospitalizations or deaths) in atypical population, such as healthy adults

VI. Peak Flu Activity

Peak flu activity is characterized by an increase in the spread and/or intensity of influenza throughout Maryland. Additionally, health systems may be surging and the number of hospitalizations due to ILI is increasing. These and other factors may create a *severe flu impact*.

A. Triggers and Warning

- Peak flu activity is occurring when greater than fifteen (15) percent of influenza tests are positive for the virus from sentinel laboratories

Severe Flu Impact

The effect of influenza is multi-tiered. The disease infects healthcare workers, which reduces the healthcare systems workforce. Simultaneously, the number of patients needing care increases. This dual-impact can be severe and might affect the healthcare system and the community.

A Severe Flu Impact might be triggered if one or more of the following factors occur:

1. Reported surge in acute healthcare facilities	2. MIEMSS is reporting that hospital facilities have diminishing hospital bed availability and Intensive Care Unit (ICU) capacity
3. Increase in number or percentage of positive (+) flu tests	4. Increase in severity and/or attack rate of circulating flu virus
5. Absenteeism rates in public and private sector has increased significantly from baseline rate	

State and Local Activity

- Coordinate conference call with statewide and local partners, if necessary
- Communication
 - Alter messages according to current impact of circulating flu
 - Increase number of press releases as appropriate
- Vaccination
 - Encourage universal vaccination effort
 - Increase number of flu clinics (if possible)

- Community Prevention and Mitigation
 - If necessary, request Strategic National Stockpile (SNS)
 - Review potential declarations under the Catastrophic Health Emergencies (CHE) Act
 - Consider enacting Pandemic Flu Attendance and Leave Policy and Advanced Sick Leave Policy
 - Review policies and procedures for potential school closures

Significance of Severe Flu Impact

A Severe Flu Impact is significant because it indicates that there may be:

1. A seasonal flu strain with unusually high virility or transmissibility circulating
2. A novel, pandemic strain of influenza circulating

B. Surveillance

- Epidemiological
 - Monitor changes in viral characteristics, including antiviral resistance
 - Monitor adverse reactions to vaccine
 - Continue to investigate influenza / ILI outbreaks
 - Monitor geographic spread and intensity of influenza

C. Communication

- Public Information
 - Continue to provide educational messages including vaccine promotion, disease characteristics, and steps to take if you get sick
 - Announce late seasonal flu clinic dates and locations
 - Communicate disease severity / alerts and monitor news coverage
 - Guidance on avoiding hospital emergency departments unless illness is severe
 - Depict alert level to Maryland residents
 - Provide information regarding mitigating medications, if applicable
 - *Severe flu impact*
 - Alter messages according to current impact of circulating flu
 - Increase number of press releases as appropriate
- Information for Healthcare Community and Providers
 - Outbreak guidance to long term care facilities (LTCFs)
 - Update on vaccine supply and availability
 - Provide recommendations regarding the use of antiviral medications
 - Provide epidemiological characterization of virus and infection control
 - Communicate with local health departments regarding status of influenza season

D. Vaccination

- State Actions
 - If necessary, activate Maryland Professional Volunteer Corps (MPVC) to provide support to local health departments vaccination efforts
 - *Severe flu impact* – encourage universal vaccination effort
- Suggested Local Actions
 - Focus vaccination efforts on high risk, underserved, and healthcare worker populations
 - *Severe flu impact* – increase number of flu clinics (if possible)

E. Community Prevention and Mitigation

- Medical Countermeasures
 - Monitor status of public and private stock of antiviral medications
 - If necessary, allocate and distribute antivirals to local community partners for potential dispensing
 - *Severe flu impact* – if necessary, request Strategic National Stockpile (SNS)
- Non-medical Intervention
 - If necessary operationalize portions of the State Pandemic Influenza Annex including recommendations regarding social distancing, isolation and quarantine, and travel restrictions
 - *Severe flu impact*
 - Review potential declarations under the Catastrophic Health Emergencies (CHE) Act
 - Consider enacting Pandemic Flu Attendance and Leave Policy and Advanced Sick Leave Policy
 - Review policies and procedures for potential school closures

F. Pandemic Threat

- Laboratory suspected or confirmed test showing a novel strain of influenza
- Significantly higher severity in flu cases in comparison to previous years

VII. Late Flu Activity

Late flu activity is characterized by decreasing levels of influenza throughout Maryland.

A. Triggers and Warning

- Late flu activity is occurring when less than fifteen (15) percent of influenza tests are positive for the virus from sentinel laboratories

B. Surveillance

- Epidemiological
 - Continue to investigate influenza / ILI outbreaks throughout Maryland
 - When applicable, publish epidemiological data

C. Communication

- Public Information
 - Report and summarize influenza season

D. Vaccination

- State Actions
 - Follow protocol for disposal of excess vaccine in Maryland
- Suggested Local Actions
 - Follow protocol for disposal of excess vaccine in local jurisdiction

E. Community Prevention and Mitigation

- Medical Countermeasures
 - Monitor antiviral dispensing
 - If necessary, retrieve medications and destroy any expired antiviral medications
- Non-medical Interventions
 - If necessary, update Pandemic Influenza Annex to reflect the outcomes of flu season

F. Pandemic Threat

- Sudden increase in reported cases of ILI late in flu season

VIII. Conclusion

Influenza is a serious disease that affects many Maryland residents every year. The Maryland Department of Health and Mental Hygiene has outlined the State's efforts in surveillance, communication, vaccination, and community prevention and mitigation in order to outline state and local actions that reduce the effect the flu has on Maryland and its residents.